



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,551	03/31/2004	Patrick R. Guido	4541-016	7434
24112	7590	11/06/2007		
COATS & BENNETT, PLLC 1400 Crescent Green, Suite 300 Cary, NC 27518			EXAMINER ORR, HENRY W	
			ART UNIT	PAPER NUMBER
			2176	
			MAIL DATE	DELIVERY MODE
			11/06/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/814,551

**Applicant(s)**

GUIDO ET AL.

**Examiner**

Henry Orr

**Art Unit**

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/21/2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is responsive to applicant's amendment dated 9/21/2007.
2. Claims 1-28 are pending in the case.
3. Claims 1, 14, 19 and 25 are independent claims.

### **Applicant's Response**

4. In Applicant's response dated 9/21/2007, applicant has amended the following:

a) Drawings

b) Claims 1, 2, 4, 14, 15, 18-20, 22, 25 and 28

Based on Applicant's amendments and remarks, the following objections and rejections previously set forth in Office Action dated 6/22/2007 are withdrawn:

a) Objection to Drawings

b) 35 U.S.C 112 2<sup>nd</sup> Rejection to claims 1-3, 5-13, 15, 18, 20-22, 25 and 28

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 4, 16, 17, 26 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 4:

Art Unit: 2176

Claim 4 recites the phrase **“a z-order of windows”**. There is insufficient antecedent basis for this limitation in the claim because it is unclear whether **“a z-order of windows”** in claim 4 is referring to previously recited **“a z-order of windows”** in base claim 1. Examiner suggest to applicant to replace the phrase in claim 4 with **“[[a]] the z-order of windows”**.

Claims 16 and 26:

Claims 16 and 26 recite the phrase **“the top level z-order”**. There is insufficient antecedent basis for this limitation in the claims because the phrase has not been previously recited in their respective base claims.

Claims 17 and 27:

Dependent claims 17 and 27 are rejected for fully incorporating the deficiencies of their respective base claims.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2176

8. **Claims 1-5, 10-22 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ashe as cited above in view Diedrichsen et al. (hereinafter "Diedrichsen"), U.S. Patent No. 5,920,313.**

Claim 1:

Ashe teaches a GUI window environment including a plurality of windows (see col. 5 lines 42-49). **(claim 1; i.e., providing a GUI environment including a plurality of windows;)**

Ashe teaches establishing a first affinity group comprising multiple related windows but less than all of said plurality of windows in a GUI environment (see col. 3 lines 1-10, col. 10 lines 29-33). **(claim 1; i.e., establishing, by a user, a first affinity group comprising a subset of two or more but less than all of said plurality of windows in said GUI environment)**

Ashe teaches said first affinity group including windows associated with an application.

Ashe fails to expressly teach said first affinity group including windows associated with at least two different applications.

However, Diedrichsen teaches relating interface objects ("affinity group including windows") associated with at least two different applications (see abstract, col. 3 lines 33-36, col. 5 lines 21-24). **(claim 1; i.e., said first affinity group including windows associated with at least two different applicants, such that the windows comprising said first affinity group are related;)**

Art. Unit: 2176

Therefore in the same field of endeavor of associating related user interface objects, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify windows belonging to an affinity group associated with an application as taught by Ashe to be associated with at least two different applications as taught by Diedrichsen to provide the benefit of easily identifying which objects are related to which other objects (see Diedrichsen; abstract, col. 2 lines 1-4, col. 3 lines 56-65)

Ashe teaches raising the z-order of windows in said first affinity group above other windows when a window within said first affinity group is selected (see col. 14 lines 60-67 thru col. 15 lines 1-6). **(claim 1; i.e., and raising a z-order of windows in said first affinity group above other windows in said GUI environment when any one window in said first affinity group is selected.)**

Claim 2:

Ashe teaches raising all windows in said first affinity group to the front of the display screen ("top level z-order") of said GUI environment (see col. 14 lines 60-67 thru col. 15 lines 1-6). **(claim 2; i.e., wherein raising the z-order of windows in said first affinity group above other windows in said GUI environment when any one window in said first affinity group is selected comprises raising all windows in said first affinity group to a top level z-order of said GUI environment.)**

Art Unit: 2176

Claim 3:

Ashe fails to expressly teach tiling the windows in said first affinity group.

However, Diedrichsen teaches tiling the window objects belonging to a set membership such that said windows may simultaneously occupy the top level z-order of said GUI environment (see col. 7 lines 60-67 thru col. 8 lines 14, Figure 5C and 5D).

**(claim 3; i.e., further comprising tiling the windows in said first affinity group such that said windows may simultaneously occupy the top level z-order of said GUI environment.)**

Therefore in the same field of endeavor of associating related user interface objects, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify windows belonging to an affinity group as taught by Ashe to be tiled and result in the windows simultaneously occupying the top level z-order as taught by Diedrichsen to provide the benefit of easily identifying all members of the set ("affinity group") to which a currently selected window object belongs (see Diedrichsen; abstract, col. 3 lines 56-65)

Claim 4:

Ashe raising all other windows in said first affinity group with a priority class to one or more z-order levels below the top level (see col. 2 lines 2-16 and lines 32-37).

**(claim 4; i.e., wherein raising a z-order of windows in said first affinity group above other windows in said GUI environment when any one window in said first affinity group is selected comprises raising the selected window to a top level z-**

Art Unit: 2176

**order of said GUI environment, and raising all other windows in said first affinity group to one or more z-order levels immediately below the top level. )**

Examiner interprets the other windows within an affinity group to be capable of being displayed at one or more z-order levels immediately below the top level because the other windows within an affinity group can have a lower priority class than the selected window within the affinity group. Thus, the selected window will be displayed at a higher z-order level than the other windows with a lower priority class within the affinity group (see col. 2 lines 2-16 and lines 32-37).

Claim 5:

Ashe teaches designating an affinity relationship between existing windows in said GUI by the user (see col.11 lines 63-67). **(claim 5; i.e., wherein establishing said first affinity group of windows comprises designating an affinity relationship between existing windows in said GUI by the user.)**

Claim 10:

Ashe teaches creating new windows from existing windows, wherein the existing window and the new window have an affinity group relationship (see col. 9 lines 53-67 thru col. 10 lines 1-14). **(claim 10; i.e., wherein establishing said first affinity group of windows comprises creating one or more new windows from an existing window by the user, said existing window and said new windows having an affinity group relationship.)**



Art Unit: 2176

Claim 11:

Ashe teaches creating new windows by executing an affinity group window creation command; wherein the existing window and the new window have an affinity group relationship (see col. 9 lines 53-67 thru col. 10 lines 1-14). **(claim 11; i.e., wherein creating one or more new windows from an existing window by the user comprises: selecting an existing window; and creating a first new window by executing an affinity group window creation command; whereby said first new window created has an affinity group relationship with said existing window.)**

Examiner interprets application program ("existing window") creating a new window to be equivalent to executing an affinity group window creation command as recited in claim 11 because the application program can specify what order the new window will be displayed within an existing affinity group relationship amongst already defined windows belonging to an application program (see col. 9 lines 53-67 thru col. 10 lines 1-14).

Claim 12:

Ashe teaches creating new windows by executing an affinity group window creation command; wherein the existing window and the new window have an affinity group relationship (see col. 9 lines 53-67 thru col. 10 lines 1-14). **(claim 12; i.e., selecting either said existing window or said first new window; and creating a second new window by executing an affinity group window creation command;**

Art Unit: 2176

**whereby said second new window created has an affinity group relationship with said existing window and said first new window.)**

Claim 13:

Ashe teaches a GUI window environment including virtual desktops (see col. 5 lines 42-49). **(claim 13; i.e., wherein said GUI environment includes virtual desktops.)**

Claim 14:

Claim 14 is a method claim and is substantially encompassed in method claim 1; therefore claim 14 is rejected under the same rationale as method claim 1 above. In addition to the rationale of claim 1, Ashe teaches creating multiple affinity groups ("first and second" affinity groups). Thus, Ashe is capable of switching between two or more affinity groups in a GUI environment as recited in claim 14 (see col. 14 lines 1-8).

Claim 15:

Ashe teaches a NewWinGroup method capable of organizing a second affinity group comprising all windows in said GUI environment not yet included in any affinity group (see col.11 lines 63-67).

Art Unit: 2176

Claim 16:

Claim 16 is a method claim and is substantially encompassed in method claim 2; therefore claim 16 is rejected under the same rationale as method claim 2 above.

Claim 17:

Claim 17 is a method claim and is substantially encompassed in method claim 3; therefore claim 17 is rejected under the same rationale as method claim 3 above.

Claim 18:

Claim 18 is a method claim and is substantially encompassed in method claim 4; therefore claim 18 is rejected under the same rationale as method claim 4 above.

Claim 19:

Claim 19 is a system claim and is substantially encompassed in method claim 1; therefore the system claim is rejected under the same rationale as method claim 1 above.

Claim 20:

Claim 20 is a system claim and is substantially encompassed in method claim 2; therefore the system claim is rejected under the same rationale as method claim 2 above.

Art Unit: 2176

Claim 21:

Claim 21 is a system claim and is substantially encompassed in method claim 3; therefore the system claim is rejected under the same rationale as method claim 3 above.

Claim 22:

Claim 22 is a system claim and is substantially encompassed in method claim 4; therefore the system claim is rejected under the same rationale as method claim 4 above.

Claim 25:

Claim 25 includes a program embodied on a computer readable medium to implement the steps that are substantially encompassed in method claim 1; therefore the claim is rejected under the same rationale as method claim 1 above.

Claim 26:

Claim 26 includes a program embodied on a computer readable medium to implement the steps that are substantially encompassed in method claim 2; therefore the claim is rejected under the same rationale as method claim 2 above.

Art Unit: 2176

Claim 27:

Claim 27 includes a program embodied on a computer readable medium to implement the steps that are substantially encompassed in method claim 3; therefore the claim is rejected under the same rationale as method claim 3 above.

Claim 28:

Claim 28 includes a program embodied on a computer readable medium to implement the steps that are substantially encompassed in method claim 4; therefore the claim is rejected under the same rationale as method claim 4 above.

**9. Claims 6-9, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ashe in view of Diedrichsen as cited above, in further view of Malamud et al. (hereinafter "Malamud"), U.S. Patent No. 5,694,561.**

Claims 6 and 7:

Neither Ashe nor Diedrichsen expressly teach designating an affinity relationship using a drag and drop technique as recited in claims 6 and 7.

However, Malamud teaches designating a project group relationship ("affinity relationship") between existing windows by the user comprising: selecting a first window; dragging said first window to an iconic display area of a project group folder ("affinity group icon on a second window"); and dropping said first window on said iconic display area of a project group folder, thereby establishing an project group relationship

Art Unit: 2176

between said first window and project group folder ("second window") (see col. 2 lines 30-55, col. 8 lines 59-67, col. 9 lines 1-8).

**(claim 6; i.e., wherein designating an affinity relationship between existing windows by the user comprises: selecting a first window; dragging said first window to an affinity group icon on a second window; and dropping said first window on said affinity group icon of said second window, thereby establishing an affinity group relationship between said first and second window.)**

Malamud teaches the capability to add a third window to the project group folder ("affinity group") as recited in claim 7 (see col. 2 lines 30-55, col. 8 lines 59-67, col. 9 lines 1-8).

**(claim 7; i.e., selecting a third window; dragging said third window to an affinity group icon on either said first or second window; and dropping said third window on said affinity group icon of said first or second window, thereby adding said third window to said affinity group.)**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the grouping of windows to established an affinity relationship as taught by Ashe to include a drag and drop technique as taught by Malamud to provide the benefit of easily forming the desired windows into a related group (see Malamud; col. 1 lines 33-57, Figure 2).

Art Unit: 2176

Claims 8 and 9:

Neither Ashe nor Diedrichsen expressly teach designating an affinity relationship using a keystroke combination technique as recited in claims 8 and 9.

Claims 8 and 9 are method claims and are substantially encompassed in method claims 6 and 7 respectively; therefore the method claims 8 and 9 are rejected under the same rationale as method claims 6 and 7 above.

In addition to the rationale of claims 6 and 7, one of ordinary skill at the time of the invention was made would have been able to implement the drag and drop technique as taught by Malamud as a keystroke combination to perform the limitations as recited in claims 8 and 9 (see Malamud; col.9 lines 9-15).

Claim 23:

Claim 23 is a system claim and is substantially encompassed in method claim 6; therefore the system claim is rejected under the same rationale as method claim 6 above.

Claim 24:

Claim 24 is a system claim and is substantially encompassed in method claim 8; therefore the system claim is rejected under the same rationale as method claim 8 above.

Art Unit: 2176

**10. Claims 6-9, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ashe in view of Diedrichsen as cited above, in further view of Haynes (hereinafter "Haynes"), U.S. Published Application No. 2005/0198585 A1.**

Claims 6 and 7:

Neither Ashe nor Diedrichsen expressly teach designating an affinity relationship using a drag and drop technique as recited in claims 6 and 7.

However, Haynes teaches designating a relationship using a drag and drop technique as cited in claims 6 and 7 (see par. 19, claims 13 and 14, Figure 3).

**(claim 6; i.e., wherein designating an affinity relationship between existing windows by the user comprises: selecting a first window; dragging said first window to an affinity group icon on a second window; and dropping said first window on said affinity group icon of said second window, thereby establishing an affinity group relationship between said first and second window.)**

**(claim 7; i.e., selecting a third window; dragging said third window to an affinity group icon on either said first or second window; and dropping said third window on said affinity group icon of said first or second window, thereby adding said third window to said affinity group.)**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the grouping of windows to established an affinity relationship as taught by Ashe to include a drag and drop technique as taught by Haynes to provide the benefit of easily forming the desired windows into a related group (see Haynes; par. 19, Figure 3).



Claims 8 and 9:

Neither Ashe nor Diedrichsen expressly teach designating an affinity relationship using a keystroke combination technique as recited in claims 8 and 9.

However, Haynes teaches designating a relationship using a keystroke combination technique as cited in claims 8 and 9 (see par. 19, claims 15 and 16, Figure 3). **(claim 8; i.e., wherein designating an affinity relationship between existing windows by the user comprises: selecting a first window; executing a first keystroke combination in said first window; selecting a second window; and executing a second keystroke combination in said second window, thereby establishing an affinity group relationship between said first and second window.)**

**(claim 9; i.e., selecting a third window; executing said first keystroke combination in said third window; selecting either said first or second window; and executing said second keystroke combination in said selected first or second window, thereby adding said third window to said affinity group.)**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the grouping of windows to established an affinity relationship as taught by Ashe to include a keystroke combination technique as taught by Haynes to provide the benefit of easily forming the desired windows into a related group (see Haynes; par. 19, Figure 3).

Art Unit: 2176

Claim 23:

Claim 23 is a system claim and is substantially encompassed in method claim 6; therefore the system claim is rejected under the same rationale as method claim 6 above.

Claim 24:

Claim 24 is a system claim and is substantially encompassed in method claim 8; therefore the system claim is rejected under the same rationale as method claim 8 above.

### ***Response to Arguments***

11. Applicant's arguments with respect to independent claims 1, 14, 19 and 25 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP §.706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2176

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Orr whose telephone number is (571) 270 1308. The examiner can normally be reached on Monday thru Friday 8 to 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on (571) 272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/29/2007

Application/Control Number: 10/814,551

Page 19

Art Unit: 2176

HO

*/Doug Hutton/*

Doug Hutton  
Supervisory Primary Examiner  
Technology Center 2100